Improving Educational Quality (IEQ) Project

THE IEQ PROCESS: ALIGNING QUALITY AND CLASSROOMS

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Report prepared by:
JANE SCHUBERT
DIANE VANBELLE-PROUTY

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Jane G. Schubert & Diane Vanbelle-Prouty

Introduction

Improving the quality of education is the responsibility of a broad and diverse set of stakeholders inside and outside the education system. Programme developers constantly seek new and innovative ways to raise the level of academic performance. Professional development strategies that recognize the need to provide continuing support to teachers are gaining more currency. Parents are moving away from a traditional passivity toward "interfering" in the teacher's role to raise issues related to their children's education. Community members now actively participate not only in providing school facilities but may appear as technical resources in the classroom. And employers are becoming increasingly vocal about the skills and knowledge required of primary and secondary school graduates in the work force. Accountability for the outcomes of educational reform initiatives has become more and more important. There is broad-based support for ongoing improvement in learning. However, while there may be consensus around the need to improve the quality of education, there may not always be consensus around the basis upon which new policies are made or new programmes are developed and implemented. Choices are frequently driven by political and economic rather than educational considerations.

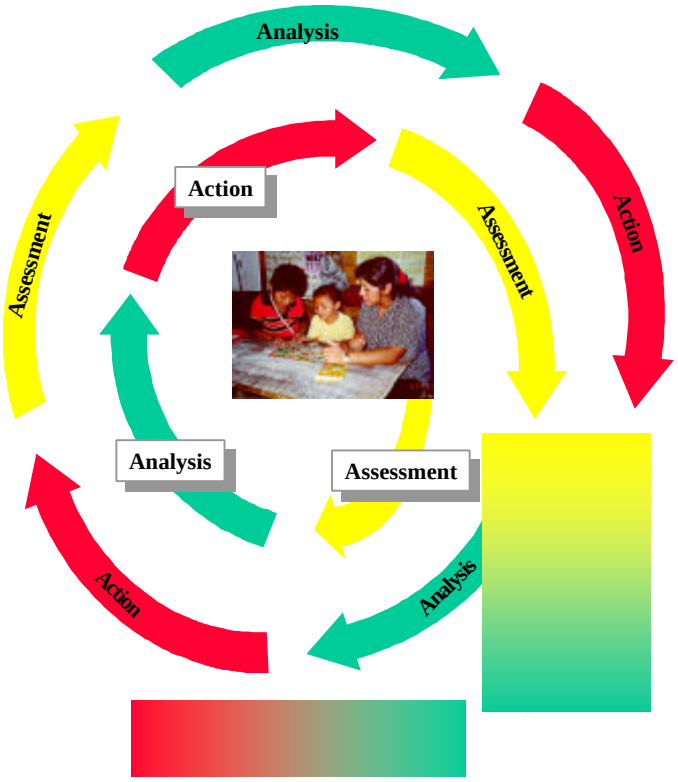
Classrooms: the entry point for system change

Since 1991, the Improving Educational Quality (IEQ) Project has applied a "cycle of improvement" to help educators in developing countries base reforms on the realities of the classroom. Indeed, in the IEQ process, classroom information about activities that relate to pupil performance – and the many factors that influence it – becomes the centerpiece for dialogue about how to improve instructional practice and implement sound policy. This brief paper describes the IEQ process for gathering and using the information about what really happens in classrooms (e.g. how pupils and teachers interact, how instructional resources are used or not used, teachers' content knowledge and pedagogical skills, and pupils' academic performance) and how that information is the entry point for the improvement of policy and practice. *IEQ holds the classroom at the center of all reform. IEQ activities begin and end in the classroom.* It is not possible to develop and implement interventions or legislate policies – all of which are designed to ultimately improve pupils' performance – unless there is initial and ongoing feedback about the learning environment, the skills, knowledge, and performance of teachers and pupils, and other factors that influence learning.

The IEQ cycle of improvement is guided by three key principles[1]:

- Information about **pupil performance** is an essential ingredient in determining success of an intervention or a reform effort.
- Systematic examinations of the classroom must reflect some aspect of the **national priority** in educational reform so that the system is receiving feedback about its efforts.
- Design and implementation of the research designs are conducted by **national partners** (e.g. educators & researchers) in host country institutions.

[1] Schubert, J.G. (2001). "The Path to Quality." Washington DC: American Institutes for Research.



The cycle of improvement begins with **assessment** of the classroom action – the environment, the teacher, the learner – which requires a variety of measures to capture diverse perspectives on the experiences and the outcomes linked to learning. To augment measures of achievement such as criterion-referenced exams or curriculum-based tests, IEQ enriches the data with other information, such as systematic observations of pupils and teachers (e.g. the nature of pupil engagement in learning and under what circumstances, the availability and use of learning resources by both pupils and teachers, and the discourse in the classroom). Other sources of information may include influences on learning provided by others (e.g. head teacher, school inspector, parents, and village leaders). Teachers are included as a resource for information and knowledge, thereby affirming the value of the teacher's opinion and experience. All this information is systematically gathered and organized into one or more data sets.

The cycle of improvement continues with the **analysis** of the data in which a variety of analytic procedures are used to examine both qualitative and quantitative information so as to provide a comprehensive, concrete profile of the factors that influence the learning experience. The meaning of the data is enriched with more than one perspective. For example, observing that teachers are not distributing textbooks to pupils to use during lessons, one may conclude non-availability of textbooks. However, data on national policy (e.g. government holding teachers accountable for damaged textbooks) and location of textbooks (e.g. locked in the head teacher's closet) offers more meaning to the finding. Few teachers are willing to risk being fined by allowing pupils to touch the books. The single finding when examined within two other findings presents a more accurate picture of the situation. This more contextually based finding pinpoints specific actions for change of policy and practice. Often, an initial analysis may raise issues that require further exploration. A situation where there was no assurance that a textbook may move from a district administrator to the local school and perhaps a pupil's home stimulated further investigation to inquire, what happened to the textbooks?

Action marks the third phase of the cycle of improvement and is a hallmark of the IEQ process. For IEQ, a measure of success for the process is the usefulness of the findings by educators at all levels of the system who are positioned to effect improvements of teacher and pupil performance. IEQ researchers share the findings so as to permit reflection, dialogue and a range of options based on the implications of the findings that have emerged from the classroom. To give the actions for change solid footing, IEQ also validates the professional insights based on

experience in the schools and regions, with views often provided by "non-researchers." New knowledge can be used to improve a program or to reevaluate and issue new policy. Findings are presented in ways (e.g. briefing papers, graphic presentations, executive summaries) that can be understood and stimulate discussion of implications. The underlying principle is that sharing the knowledge empowers potential users to base actions on reality rather than hypothetical situations. The next section illustrates how feedback and reflection illuminate a teacher's understanding about her own teaching and the influence her approach has on her pupils.

Teachers: the critical variable for system change

In most developing nations, the challenge of providing high quality teachers has moved from an issue of "development" to one of "crisis." One stimulus for this shift is that universal access to primary school education and a supportive learning environment do not always coexist. Although access may be a recognized priority among stakeholders and across sectors, the desire to open the classroom doors to all pupils has placed enormous stress on overburdened systems. Another harbinger of crisis is the tragic intrusion into the lives of teachers and children due to HIV/AIDS. Recruiting, training, and supporting enough teachers to provide quality learning environments is particularly challenging. Yet, the success of most educational reform efforts rests with the teacher, who typically receives limited preparation and ongoing professional support to fulfill his or her responsibilities. *Teachers are the keystone of educational reform.* The critical ingredient is a teacher's willingness, ability and self-confidence to examine what happens in his or her classroom that makes a difference in her ability to teach and a pupil's ability to learn.

Research in the past decade has underscored the need to bring the teacher more centrally into the process of reform. The is due in large part to the critical role that teachers hold in framing what children do or do not learn. Consider the ways in which the "voice of the teacher" holds potential: as a source of information deemed important about the class (i.e. through interview, focus groups, observations); as a representative of those receiving feedback from the research (e.g. teacher circles, conversations with researchers); and as a key user of the findings (e.g. encouraging more pupil questions, organizing small learning groups) where it matters most – in the classroom and with the pupils. The local evidence gathered from classrooms and schools familiar to those who "take the action" – particularly teachers – equips them with new, constructive insights about their own behavior and ways in which it affects their pupils. Classroom observations and follow-up discussion also enables teachers to participate in a process that promotes "reflective practice." This grounds what is being learned for both the researcher and the teacher in the daily realities and press of the classroom. Without this, teachers often are unable to benefit from the support that is provided.

Imagine the following: *The lesson was on health (childhood diseases) in a P4 class. The teacher moved through the columns of children calling on one pupil and then another. She encouraged them to share their stories about illnesses they had. One girl described her younger brother who had measles, how sick he was and how her mother helped him feel better. Any inaccuracies about a disease were clarified so the class would learn the correct information. Questions to pupils encouraged critical thinking. The lesson/discussion was embedded in the reality of the pupils' lives and they enjoyed sharing their stories. The pupils and teacher laughed and talked together. Pupils were not afraid to ask questions or suggest possible answers.*

A second lesson was on math (geometric shapes). The teacher talked: the pupils listened. When the teacher finally questioned the pupils, any incorrect answers were met with "wrong" and the next pupil was given a chance to respond. No explanations for the "wrong" answers, even when one pupil called a square a triangle. None of the shapes in the class or on the school ground were used in the lesson. The teacher became impatient and the pupils became increasingly quiet. They didn't want to be "wrong."[2]

Consider the situations described above. Two lessons are presented, taken from observations in a P4 West African class. The first teacher observed was presenting a lesson on infectious diseases in a P4 health classroom. The

[2] Vanbelle-Prouty, D. (1999). "Teachers I Have Known." Keynote address given at World Bank Workshop on Quality Education for Girls, Mauritania.

teacher moved through the classroom calling on one pupil and then another. She encouraged them to share their stories about illnesses, tying in what they already knew with what she wanted them to learn. Inaccuracies and wrong answers were clarified so that pupils were encouraged to engage in higher order critical learning. Everything about the lesson was embedded in the reality of the pupil's lives and they enjoyed the learning and teaching that was taking place. The classroom presented a risk free environment for all the students.

In contrast, the second teacher was presenting a lesson on geometric shapes. The teacher stood at the front of the classroom. She talked: the pupils listened. Incorrect answers where met dismissively with the word, "wrong," and no effort was made to clarify *why* something was not correct. Although an abundance of geometric shapes were in view (the window, the door, a large round basket, the table, etc.) the teacher never drew on these shapes to help reinforce student learning or link it to the shapes in their lives. The teacher was impatient and the students were quiet and withdrawn afraid to present a wrong answer.

Ironically, the two teachers in these vignettes were the same individual. After the lessons the teacher told the observer, "I know I am a good teacher for health but not for math. I don't know what I do differently." Further conversation revealed the way the teacher felt when she taught the two subjects and the differences she noticed in the pupils' participation and in her interactions with them. As she talked about this she began to see the relationship between her own actions and their engagement and learning. This "epiphany " was a major shift in thinking and she began to comprehend her central role and responsibility in what was taking place and the student's learning. It was in this shift that she was able to see the relationship between the quality of the learning experience and what she did in her teaching. This was the first step in reflection.

Experience after experience underscores how central it is that teachers be provided the opportunity to engage in this kind of reflection. And this process of introspective reflection and sharing needs to occur at all levels of the system. During a training seminar being held in southern Africa, primary classroom teachers, ministry officials and educational researchers were brought together, to discuss approaches to improve learning. During the first few days of the seminar the teachers sat quietly together reluctant to share while the others talked loudly about what they knew and what needed to be done. As the seminar proceeded and questions were asked about what was taking place in classrooms and what pupils do, the teachers became increasingly more vocal about these things until by the end of the seminar it was readily recognized that the teachers were the only ones who could provide the information that was essential if changes were to occur. This was a critical shift in the reform process: Those present recognized that the substance necessary for fruitful policy deliberations is a function of teachers having a voice and a venue to share what they know.

Teachers open to improving their instruction by self-examination about their teaching practice can be empowered to accomplish it. They can move away from dependency, isolation and powerlessness because they assume responsibility for their own improvement. Not only does the process of listening to teachers validate their role by reinforcing the point that what they know and do is important, but being heard by others in the system helps teachers recognize that they do indeed know more about teaching than they themselves have acknowledged. Including the voice of the teacher in the policy dialogue diminishes the potential for legislating policies that bear little hope of being implemented because they are not aligned with the reality of the classroom situation. Teacher participation in a change process also promotes "reflective practice" and classroom grounding that empowers teachers.

The practice of actively listening to the "voice of the teacher" holds potential for improving teacher quality by bringing the teacher into the entire reform process as:

- a source of important classroom information obtained through interviews, focus groups, and observations;
- a representative of those receiving feedback from the research via teacher circles and conversations with researchers; and
- a key user of the findings, encouraging more pupil questions and organizing small learning groups where it most matters – in the class and with the pupils.

The local evidence gathered from classrooms and schools familiar to those who "take the action," particularly teachers, equips them with new, constructive insights about their own behavior and ways in which it affects their pupils. Participation in a process that promotes "reflective practice" for teachers empowers them to:

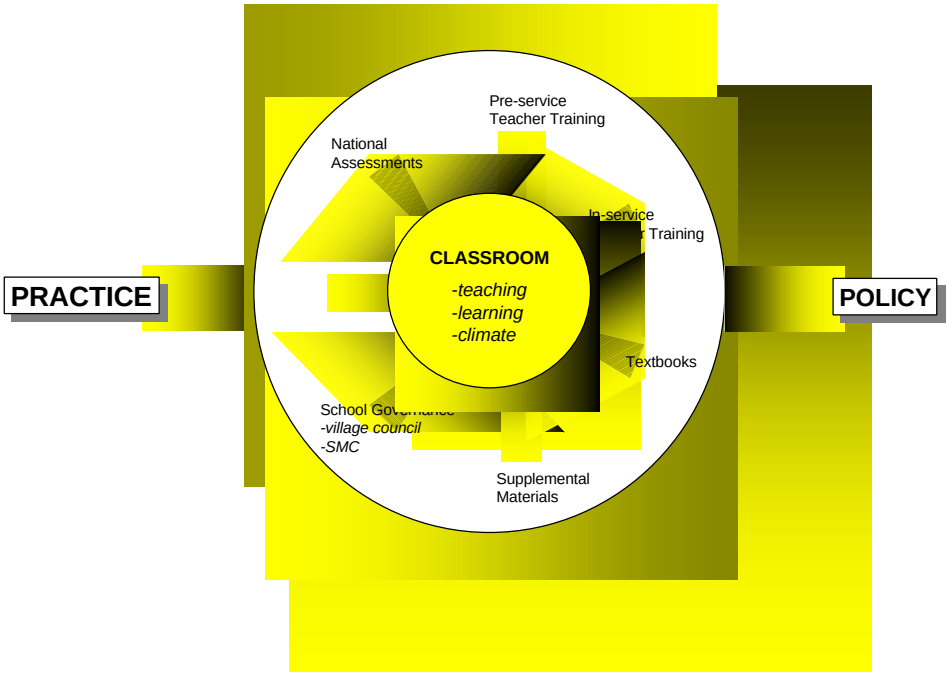
- Pinpoint behaviors and practices that do – or do not – work to promote learning
- Identify specific ways in which effective practices can be applied to other tasks, subjects or lessons
- Identify ways of receiving and providing support within the school and community

Teachers who are open to self-examination of their teaching practice can be empowered to improve their instruction. They can move away from dependency, isolation and powerlessness because they assume responsibility for their own improvement. Not only does the process of listening to teachers validate their role by reinforcing the point that what they know and do is important, but being heard by others in the system helps teachers recognize that they do indeed know more about teaching than they themselves have acknowledged.

System improvement: linked to classroom information

Systematic, collaborative efforts to gather information about teaching and learning in the classroom constitute a productive and useful approach to improving the quality of instructional practice. By featuring a cycle of improvement, IEQ fosters change as a work in progress that is developed through the dialogue and actions of stakeholders, policymakers and practitioners. To foster this dialogue, evidence about how classroom experiences and the classroom environment affect pupil progress frames the discussion. The graphic below depicts the classroom as the focal point of information that pinpoints many opportunities for using that information for system improvement.

Using Classroom Information to Strengthen Educational Systems



As illustrated, both policy and practice may benefit from using information about the reality of classroom influences that affect learning. For example, evidence that shows how teachers do and do not use textbooks as learning tools may be used to identify all or part of an inset programme but may also be used to frame policy around the distribution

of textbooks. In Malawi, IEQ is working in partnership with the Malawi Institute of Education (MIE) and Save the Children/USA/Malawi Field Office, to systematically examine the implementation of Save's QUEST (Quality Education Through Supporting Teaching) project. Researchers in this project immediately applied baseline data to teacher training sessions, using the information to sharpen strategies for improving pupil-teacher interaction and techniques for pupil learning groups.[3]

We believe that IEQ has validated the classroom as the key source of information about system improvement and that such improvement begins and ends in the classroom. The successful integration of the IEQ process requires enabling conditions within the system. Among practitioners, the "democratization" of information is essential so that:

- teachers and head teachers, parents and other community stakeholders share in the dialogue about the findings of classroom–based research;
- their input about their training and experience is validated by listeners; and
- that they receive system support to move toward professional accountability for their own teaching and learning.

The opportunity for reflection and dialogue is a lever for change. The positive impact of this change is, however, critically dependent upon the sensibilities and support of policy leaders.

In the ideal world, how might educational decision makers respond? They would value knowledge about the classroom as central to education reform. They would seek to understand and convert evidence about teaching practice and pupil performance into realistic dialogue for improving the quality of learning. They would understand that, as important as it is to invest in higher salaries for practitioners, no investment is more important than providing opportunities for local educators to engage in the substantive discussion that realizes personal – and societal – needs for professional development.

Mechanisms for receiving feedback from regional and local educators can be powerful techniques for improving the quality of learning. But they are no panacea; government alone cannot do all that is necessary to meet the demands for increased access to learning and the service delivery required to provide it. This is civil society's responsibility.

Endnotes:

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[3] Namathaka, L., Mabeti, F., and Dowd, A.J. (2000). "Quest for Learning: Using Research to Inform Project Implementation." Washington DC: American Institutes for Research. QUEST is funded by USAID/Malawi.